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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Watowich et al.)	Group Art Unit:	1632
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Filed: October 15, 2001)		
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For: DRUG DISCOVERY METHODS)		

SUBMISSION OF FORMAL DRAWINGS UNDER 37 C.F.R. §1.85

Assistant Commissioner for Patents
Attn: Box Missing Parts
Washington D.C. 20231

Sir/Madam:

Attached please find five sheets of Formal Drawings for the above-identified patent application. The Formal Drawings include the proposed corrections to Figures 2B and 2C detailed in the attached Preliminary Amendment. Please contact the undersigned attorney if you have any questions.

CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Attn: Box Missing Parts, Washington, D.C. 20231, on this 28th day of January, 2002.

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Respectfully submitted,

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SEQ ID NO:12

GTCATGAAAT TGGAATCTGA CAAGACGTTC CCAATCATGT TGGAAGGGAA
GATAAACGGC TACGCTTGTG TGGTCGGAGG GAAGTTATTC AGGCCGATGC
ATGTGGAAGG CAAGATCGAC AACGACGTTC TGGCCGCGCT TAAGACGAAG
AAAGCATCCA AATACGATCT TGAGTATGCA GATGTGCCAC AGAACATGCG
GGCCGATACA TTCAAATACA CCCATGAGAA ACCCCAAGGC TATTACAGCT
GGCATCATGG AGCAGTCCAA TATGAAAATG GGC GTTTCAC GGTGCCGAAA
GGAGTTGGGG CCAAGGGAGA CAGCGGACGA CCCATTCTGG ATAACCAGGG
ACGGGTGGTC GCTATTGTGC TGGGAGGTGT GAATGAAGGA TCTAGGACAG
CCCTTTCAGT CGTCATGTGG AACGAGAAGG GAGTTACCGT GAAGTATACT
CCGGAGAACT GCGAGCAATG GTAATGA

SEQ ID NO:1

VMKLESDKTF PIMLEGKING YACVVGGKLF RPMHVEGKID NDVLAALKTK
KASKYDLEYA DVPQNMRA DT FKYTHEKPQG YYSWHHGA VQ YENGRFTVPK
GVGAKGDSGR PILDNQGRVV AIVLGGVNEG SRTALSVVMW NEKGVTVKYT
PENCEQW

FIGURE 1

SEQ ID NO:31

Adaptein-1 nucleotide sequence:

GTCATGAAAT TGAATCTGA CAAGACGTTT CCAATCATGT TGAAGGGAA
GATAAACGGC TACGCTTGTG TGGTCGGAGG GAAGTTATTC AGGCCGATGC
ATGTGGAAGG CAAGATCGAC AACGACGTTT TGGCCGCGCT TAAGACGAAG
AAAGCATCCA AATACGATCT TGAGTATGCA GATGTGCCAC AGAACATGCG
GGCCGATACA TTCAAATACA CCCATGAGAA ACCCAAGGC TATTACAGCT
GGCATCATGG AGCAGTCCAA TATGAAAATG GCGTTTCAC GGTGCCGAAA
GGAGTTGGGG CCAAGGGAGA CAGCGGACGA CCCATTCTGG ATAACCAGGG
ACGGGTGGTC GCTATTGTGC TGGGAGGTGT GAATGAAGGA TCTAGGACAG
CCCTTTCAGT CGTCATGTGG AACAAAGCTTT CTCCACATTA TGCTCAACTC
GAGGGAGTTA CCGTGAAGTA TACTCCGGAG AACTGCGAGC AATGGTAATG
AGC

SEQ ID NO:32

Adaptein-2 nucleotide sequence:

GTCATGAAAT TGAATCTGA CAAGACGTTT CCAATCATGT TGAAGGGAA
GATAAACGGC TACGCTTGTG TGGTCGGAGG GAAGTTATTC AGGCCGATGC
ATGTGGAAGG CAAGATCGAC AACGACGTTT TGGCCGCGCT TAAGACGAAG
AAAGCATCCA AATACGATCT TGAGTATGCA GATGTGCCAC AGAACATGCG
GGCCGATACA TTCAAATACA CCCATGAGAA ACCCAAGGC TATTACAGCT
GGCATCATGG AGCAGTCCAA TATGAAAATG GCGTTTCAC GGTGCCGAAA
GGAGTTGGGG CCAAGGGAGA CAGCGGACGA CCCATTCTGG ATAACCAGGG
ACGGGTGGTC GCTATTGTGC TGGGAGGTGT GAATGAAGGA TCTAGGACAG
CCCTTTCAGT CGTCATGTGG AACAAAGCTTA GAAGCGGTAC TCAATGGCTC
GAGGGAGTTA CCGTGAAGTA TACTCCGGAG AACTGCGAGC AATGGTAATG
AGC

SEQ ID NO:33

Adaptein-1 protein sequence:

VMKLESDKTF PIMLEGKING YACVVGGKLF RPMHVEGKID NDVLAALKTK
KASKYDLEYA DVPQNMRA DT FKYTHEKPQG YYSWHHGA VQ YENGRFTVPK
GVGAKGDSGR PILDNQGRV V AIVLGGVNEG SRTALSVVMW NKLSPHYAQL
EGVTVKYTPE NCEQW

SEQ ID NO:34

Adaptein-2 protein sequence:

VMKLESDKTF PIMLEGKING YACVVGGKLF RPMHVEGKID NDVLAALKTK
KASKYDLEYA DVPQNMRA DT FKYTHEKPQG YYSWHHGA VQ YENGRFTVPK
GVGAKGDSGR PILDNQGRV V AIVLGGVNEG SRTALSVVMW NKLSRGTQWL
EGVTVKYTPE NCEQW

FIGURE 2A

FIGURE 2B

Alignment of adaptein nucleotide sequences with CCD sequence:

SEQ ID NO:31	A-1	GTCATGAAAT	TGGAATCTGA	CAAGACGTTT	CCAATCATGT	TGGAAGGGAA
SEQ ID NO:32	A-2	GTCATGAAAT	TGGAATCTGA	CAAGACGTTT	CCAATCATGT	TGGAAGGGAA
SEQ ID NO:12	CCD	GTCATGAAAT	TGGAATCTGA	CAAGACGTTT	CCAATCATGT	TGGAAGGGAA
	A-1	GATAAACGGC	TACGCTTGTG	TGGTCGGAGG	GAAGTTATTC	AGGCCGATGC
	A-2	GATAAACGGC	TACGCTTGTG	TGGTCGGAGG	GAAGTTATTC	AGGCCGATGC
	CCD	GATAAACGGC	TACGCTTGTG	TGGTCGGAGG	GAAGTTATTC	AGGCCGATGC
	A-1	ATGTGGAAGG	CAAGATCGAC	AACGACGTTT	TGGCCGCGCT	TAAGACGAAG
	A-2	ATGTGGAAGG	CAAGATCGAC	AACGACGTTT	TGGCCGCGCT	TAAGACGAAG
	CCD	ATGTGGAAGG	CAAGATCGAC	AACGACGTTT	TGGCCGCGCT	TAAGACGAAG
	A-1	AAAGCATCCA	AATACGATCT	TGAGTATGCA	GATGTGCCAC	AGAACATGCG
	A-2	AAAGCATCCA	AATACGATCT	TGAGTATGCA	GATGTGCCAC	AGAACATGCG
	CCD	AAAGCATCCA	AATACGATCT	TGAGTATGCA	GATGTGCCAC	AGAACATGCG
	A-1	GGCCGATACA	TTCAAATACA	CCCATGAGAA	ACCCCAAGGC	TATTACAGCT
	A-2	GGCCGATACA	TTCAAATACA	CCCATGAGAA	ACCCCAAGGC	TATTACAGCT
	CCD	GGCCGATACA	TTCAAATACA	CCCATGAGAA	ACCCCAAGGC	TATTACAGCT
	A-1	GGCATCATGG	AGCAGTCCAA	TATGAAAATG	GGCGTTTCAC	GGTGCCGAAA
	A-2	GGCATCATGG	AGCAGTCCAA	TATGAAAATG	GGCGTTTCAC	GGTGCCGAAA
	CCD	GGCATCATGG	AGCAGTCCAA	TATGAAAATG	GGCGTTTCAC	GGTGCCGAAA
	A-1	GGAGTTGGGG	CCAAGGGAGA	CAGCGGACGA	CCCATTCTGG	ATAACCAGGG
	A-2	GGAGTTGGGG	CCAAGGGAGA	CAGCGGACGA	CCCATTCTGG	ATAACCAGGG
	CCD	GGAGTTGGGG	CCAAGGGAGA	CAGCGGACGA	CCCATTCTGG	ATAACCAGGG
	A-1	ACGGGTGGTC	GCTATTGTGC	TGGGAGGTGT	GAATGAAGGA	TCTAGGACAG
	A-2	ACGGGTGGTC	GCTATTGTGC	TGGGAGGTGT	GAATGAAGGA	TCTAGGACAG
	CCD	ACGGGTGGTC	GCTATTGTGC	TGGGAGGTGT	GAATGAAGGA	TCTAGGACAG
				(HindIII)		(XhoI)
	A-1	CCCTTTTCAGT	CGTCATGTGG	AAC---AAGCTT	TCTCCACATTA	TGCTCAA
	A-2	CCCTTTTCAGT	CGTCATGTGG	AAC---AAGCTT	AGAAGCGGTAC	TCAATGG
	CCD	CCCTTTTCAGT	CGTCATGTGG	AACGAG-----	-----	-----
	A-1	---GGAGTTA	CCGTGAAGTA	TACTCCGGAG	AACTGCGAGC	AATGGTAATGAGC
	A-2	---GGAGTTA	CCGTGAAGTA	TACTCCGGAG	AACTGCGAGC	AATGGTAATGAGC
	CCD	AAGGGAGTTA	CCGTGAAGTA	TACTCCGGAG	AACTGCGAGC	AATGGTAATGAGC

FIGURE 2B

SEQ ID NO:	Alignment of adaptein	protein sequences with CCD sequence:
33 A-1	VMKLES SD KTF	PIMLE G KGING YACVVGGKLF RPMHVEGKID NDVLAALKTK
34 A-2	VMKLES SD KTF	PIMLE G KGING YACVVGGKLF RPMHVEGKID NDVLAALKTK
1 CCD	VMKLES SD KTF	PIMLE G KGING YACVVGGKLF RPMHVEGKID NDVLAALKTK
A-1	KASKYDLEYA	DVPQNM RA DT FKYTHEK PQ G YYSWHHGAVQ YENGRFTVPK
A-2	KASKYDLEYA	DVPQNM RA DT FKYTHEK PQ G YYSWHHGAVQ YENGRFTVPK
CCD	KASKYDLEYA	DVPQNM RA DT FKYTHEK PQ G YYSWHHGAVQ YENGRFTVPK
A-1	GVGAKGDSGR	PILDNQGRVV AIVLGGVNEG SRTALSVVMW N-KLSPHYAQL
A-2	GVGAKGDSGR	PILDNQGRVV AIVLGGVNEG SRTALSVVMW N-KLRSGTQWL
CCD	GVGAKGDSGR	PILDNQGRVV AIVLGGVNEG SRTALSVVMW NE
A-1	-GVTVKYTPE	NCEQW
A-2	-GVTVKYTPE	NCEQW
CCD	KGVTVKYTPE	NCEQW

FIGURE 2C

SEQ ID NO:6

5' ATGTACGGTCGTAAAAACGTCGTCAGCGTCGTCGTGTCATGAAATTGGAATCTGACAAGACG
TTCCCAATCATGTTGGAAGGGAAGATAAACGGCTACGCTTGTGTGGTCGGAGGGAAGTTATTTCAG
GCCGATGCATGTGGAAGGCAAGATCGACAACGACGTTCTGGCCGCGCTTAAGACGAAGAAAGCAT
CCAAATACGATCTTGAGTATGCAGATGTGCCACAGAACATGCGGGCCGATACATTCAAATACACC
CATGAGAAACCCCAAGGCTATTACAGCTGGCATCATGGAGCAGTCCAATATGAAAATGGGCGTTT
CACGGTGCCGAAAGGAGTTGGGGCCAAGGGAGACAGCGGACGACCCATTCTGGATAACCAGGGAC
GGGTGGTCGCTATTGTGCTGGGAGGTGTGAATGAAGGATCTAGGACAGCCCTTTCAGTCGTCATG
TGAACAAGCTTGGATCTTCTCTCGAGGGAGTTACCGTGAAGTATACTCCGGAGAACTGCGAGCA
ATGGTAA3'

SEQ ID NO:7

MYGRKKRRQRRRVMKLESDKTFPIMLEGKINGYACVVGGKLFPRPMHVEGKIDNDVLAALKTKKAS
KYDLEYADVPQNMRA DTFKYTHEKPQGYYSWHHGAVQYENGRFTVPKGVGAKGDSGRPILDNQGR
VVAIVLGGVNEGSRTALSVVMWNEKGVTVKYTPENCEQW

FIGURE 3